

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/SA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/CA2004/000473

International filing date (day/month/year)
26.03.2004

Priority date (day/month/year)
26.03.2003

International Patent Classification (IPC) or both national classification and IPC
C08B30/20, C08B31/00, C08B35/00, C08L3/12, A61L15/60

Applicant
LE GROUPE LYSAC INC.

1. This opinion contains indications relating to the following items:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Box No. I | Basis of the opinion |
| <input checked="" type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/SA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/CA2004/000473

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
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Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	14-35
	No: Claims	1-13
Inventive step (IS)	Yes: Claims	14-25
	No: Claims	1-13,26-35
Industrial applicability (IA)	Yes: Claims	1-35
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

✓ The following documents are referred to in this communication:

- ✓ D1 : W.-M. KULICKE ET AL.: "Swelling and Rheological Studies of Some Starch Hydrogels" STARCH-STÄRKE, vol. 41, no. 4, 1989, pages 140-146, XP009032649 WEINHEIM
- ✓ D2 : EP 0 000 247 B (STALEY MFG CO A E) 4 August 1982
- ✓ D3 : EP 0 769 501 A (UNILEVER PLC ; UNILEVER NV (NL)) 23 April 1997
- ✓ D4 : GB 2 043 668 A (FRESENIUS CHEM PHARM IND) 8 October 1980

✓ ✓ Document D1 discloses on page 141, item 2.2 the crosslinking of amylopectin with epichlorhydrin. The water retention capacity of the product is measured (Fig. 5 and 6). Thus, contrary to the statement on page 3, lines 11-15 of the description, the product of D1 is an absorbent material and destroys the novelty of the subject-matter of claims 1, 3, 4 and 10.

✓ ✓ Document D2 discloses in claim 1 and example 1 the preparation of water absorbing crosslinked waxy maize starch. The disclosure of this document destroys the novelty of the subject-matter of claims 1, 3, 4 and 7-9.

✓ ✓ Document D3 discloses in claims 1-9 and examples 1-14 a process comprising the steps of a) mixing amylopectin (waxy maize starch) with water, b) feeding the mixture into an extruder to produce an extrudate, c) cooling the extrudate and d) grinding the extrudate. This process comprises steps a) - d) of present claim 13 wherein the cooling step of D3 is considered as an equivalent to the aging step of claim 13.

The products of D3 are used in the food industry. However, being prepared by a process according to claim 13 and using the same ingredients, the products must as well have absorbing properties. Therefore D3 is considered as novelty destroying for the subject-matter of claims 1, 2, 4, 7-9, 13 and 23.

✓ ✓ Document D4 discloses in claims 1, 2 and 9 a crosslinked hydroxyethyl starch comprising a proportion of at least 90% amylopectin and its use as a wound secretion absorbent, see also page 1, line 15 to page 2, line 3. The disclosure of D4 is considered novelty destroying of the subject-matter of claims 1, 3, 4 and 10-12.

**WRITTEN OPINION OF THE
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AUTHORITY (SEPARATE SHEET)**

International application No.

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- ✓ ☒ No relevant prior art is available for the process of claim 14 or a process containing the combined features of claims 13 and 24.
- ✓ ☒ With respect to claims 26 to 35 the combination of an absorbent material as known from D1 to D4 with a further known absorbent material and its use is not deemed to involve an inventive step.